ECTRIMS 2022
38th Congress of the European Committee for Treatment and Research in Multiple Sclerosis
27th Annual RIMS Conference
26 – 28 October 2022
Amsterdam, The Netherlands

P052

Longer-term safety and efficacy of ofatumumab in recently diagnosed and treatment naïve patients is consistent with the overall population in the ALITHIOS open-label extension study

J. Gärtner[1], S.L Hauser[2], A. Bar-Or[3], X. Montalban[4], J.A Cohen[5], D. Robertson[6], A.H Cross[7], C.M Hersh[8], K. Deiva[9], K. Goeril[10], A.D. Gupta[11], R. Zielman[12], S. Ansari[13], B. Kieseier[10], L. Kappos[14]

[1]Department of Paediatrics and Adolescent Medicine, Division of Paediatric Neurology, University Medical Centre Göttingen, Georg August University Göttingen, Gottingen, Germany, [2]UCSF Weill Institute for Neurosciences, University of California, San Francisco, California, United States, [3]Center for Neuroinflammation and Experimental Therapeutics and Department of Neurology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, United States, [4]Department of Neurology Neuroimmunology, Centre d'Esclerosi Múltiple de Catalunya (Cemcat), Hospital Universitari Vall d'Hebron, Barcelona, Spain, [5]Department of Neurology, Mellen MS Center, Neurological Institute, Cleveland Clinic, Cleveland, Ohio, United States, [6]Multiple Sclerosis Division, Department of Neurology, University of South Florida, Tampa, Florida, United States, [7]Department of Neurology, Section of Neuroimmunology, Washington University School of Medicine, Saint Louis, Missouri, United States, [8]Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, Nevada, United States, [9]Department of Pediatric Neurology, University Hospitals Paris Saclay, Hôpital Bicêtre, National Reference Center for Rare Inflammatory Brain and Spinal Diseases, Le Kremlin Bicêtre, France, [10]Novartis Pharma AG, Basel, Switzerland, [11]Novartis Healthcare Pvt. Ltd, Hyderabad, India, [12]Novartis Pharma B.V, Amsterdam, Netherlands, [13]Novartis Institutes for Biomedical, Massachusetts, United States, [14]Research Center for Clinical Neuroimmunology and Neuroscience Basel (RC2NB) and MS Center, Departments of Head, Spine and Neuromedicine, Clinical Research, Biomedicine and Biomedical Engineering, University Hospital and University of Basel, Basel, Switzerland

Introduction: Ofatumumab (OMB) demonstrated superior efficacy and similar safety vs teriflunomide in the Phase 3 ASCLEPIOS I/II trials in the overall population of patients with relapsing MS (RMS) and a subgroup of patients recently diagnosed (≤3 years) and treatment-naïve (RDTN). In the overall population, OMB has demonstrated well-tolerated safety and sustained longer-term efficacy for up to 4 years in the ALITHIOS open-label extension study.
Objective: To assess the longer-term safety and efficacy of OMB for up to 4 years (data cut-off: 25-Sep-2021) in a subgroup of RDTN RMS patients.
Methods: Efficacy outcomes (annualized relapse rate (ARR), time-to-3/6-month confirmed disability worsening [3m/6mCDW], number of Gd+T1 lesions, annualized T2 lesion rate) up to 4 years were analyzed in two groups: 1) RDTN patients randomized to OMB in ASCLEPIOS I/II and continuing OMB in ALITHIOS (continuous; n=314) and 2) RDTN patients randomized to TER in ASCLEPIOS I/II, switched to OMB in ALITHIOS (switch; n=301). Safety outcomes were analyzed in overall (RDTN patients enrolled in ASCLEPIOS I/II and ALITHIOS, n=546), continuous (OMB in core studies+ALITHIOS; n=314) and switch groups (TER in ASCLEPIOS I/II and OMB in ALITHIOS; n=232).
Results: Mean age at baseline was 36.8/35.7 years, 69.1%/65.8% were female, and the mean EDSS was 2.30/2.22 in the continuous/switch groups. Over ASCLEPIOS I/II+ALITHIOS, the ARR in the continuous group remained low up to 4 years and the cumulative number of confirmed relapses was 42% lower in continuous vs switch group. Within group (ASCLEPIOS I/II vs ALITHIOS) analysis showed that continuous use of OMB was associated with a significant reduction in ARR by 43.1%; switching to OMB resulted in a pronounced reduction in ARR (76.6%). The difference in KM estimates at Month 36 for 3m/6mCDW indicates that risk of events was similar in both the treatment groups after switching to OMB. Treatment emergent adverse events (AEs) occurred in 93.6%/83.2% of the continuous/switch groups and serious AEs were reported in 16.2%/7.8%, respectively. Detailed safety (severity of AEs, treatment discontinuation) and efficacy data will be presented at the congress.
Conclusion: Consistent with longer-term safety and efficacy findings for up to 4 years in the overall population of the ALITHIOS study, these analyses show the favorable benefit–risk profile of OMB in RDTN RMS patients, supporting its use as a first-line therapy at an early stage of the MS disease course.
Disclosure: This study was funded by Novartis Pharma A.G., Basel, Switzerland.
Jutta Gartner in the past 3 years, has received fees for lectures and consultancy fees from Bayer, Biogen, Merck, Novartis and Sanofi, as well as funding for a research project from Novartis.
Stephen L. Hauser has received personal compensation from Annexon, Alector, Accure, and Neurona; he has also received travel reimbursement from F. Hoffmann-La Roche Ltd and Novartis for CD20-related meetings and presentations. **Amit Bar-Or**has participated as a speaker in meetings sponsored by and received consulting fees and/or grant support from: Accure, Atara Biotherapeutics, Biogen, BMS/Celgene/Receptos, GlaxoSmithKline, Gossamer, Janssen/Actelion, Medimmune, Merck/EMD Serono, Novartis, Roche/Genentech, Sanofi-Genzyme.
Xavier Montalban has received speaking honoraria and travel expenses for participation in scientific meetings, has been a steering committee member of clinical trials or participated in advisory boards of clinical trials in the past years with Actelion, Alexion, Bayer, Biogen, Celgene, EMD Serono, Genzyme, Immunic, Medday, Merck, Mylan, Nervgen, Novartis, Roche, Sanofi-enzyme, Teva Pharmaceutical, TG Therapeutics, Excemed, MSIF and NMSS.
Jeffrey A. Cohen received personal compensation for consulting for Biogen, Bristol-Myers Squibb, Convelo, Genentech, Janssen, NervGen, Novartis, and PSI; speaking for H3 Communications; and serving as an Editor of Multiple Sclerosis Journal.
Derrick Robertson has received fees for consulting, contracted research and speaker's bureau from Biogen, Celgene, EMD Serono, Genentech, Sanofi Genzyme, Janssen, TG therapeutics; consulting fees and speakers bureau for Bristol Myers Squibb, Horizon, and Alexion; consulting fees and contracted research for Novartis; consulting fees for Greenwich biosciences; contracted research for GW Pharmaceuticals, PCORI, Atara Biotherapeutics and CorEvitas.
Anne H. Cross has received consulting fees, support, and honoraria from Biogen, Celgene, Bristol Myers Squibb, EMD Serono, Merck, Genentech, Roche, Greenwich Biosciences (Jazz Pharmaceuticals), Horizon Therapeutics, Janssen (subsidiary of Johnson & Johnson), Novartis, TG Therapeutics, Academic CME, Projects In Knowledge, CME Outfitters, WebMD, Conrad N. Hilton Foundation, Potomac Center for Medical Education, The Consortium of Multiple Sclerosis Centers, and ACTRIMS; has received a grant from the Department of Defense, USA; has been the secretary (elected) of The Consortium of Multiple Sclerosis Centers, member of the scientific advisory board of Race to Erase MS, program committee (chair) of ACTRIMS, member of the COVID-19 advisory committee of the National Multiple Sclerosis Society and National Multiple Sclerosis Society representative on the Progressive MS Alliance; has participated on the data safety monitoring board or advisory board for Race to Erase MS (charity), National Multiple Sclerosis Society, Novartis, EMD Serono, Biogen, Celgene/Bristol Myers Squibb, and TG Therapeutics; has received patent for "Yablonskiy DA, Sukstansky AL, Wen J, Cross AH. Methods for simultaneous multi-angular relaxometry of tissue using magnetic resonance imaging. Patent 15060-630 (015875)."
Carrie M. Hersh has received speaking and consulting fees from Genentech, Genzyme, Biogen, Novartis, and EMD-Serono. She has received research support paid to her institution by PCORI, Biogen, and Genentech.
Kumaran Deiva has received personal compensation for speaker activities from Novartis and Sanofi.
Karlsson Goeril, Ayan Das Gupta, Ronald Zielman, Soudeh Ansari, Bernd Kieseier are employees of Novartis.
Ludwig Kappos' institution (University Hospital Basel) has received the following exclusively for research support: steering committee, advisory board, and

consultancy fees (Actelion, Addex, Bayer HealthCare, Biogen Idec, Biotica, Genzyme, Lilly, Merck, Mitsubishi, Novartis, Ono Pharma, Pfizer, Receptos, Sanofi, Santhera, Siemens, Teva, UCB, and Xenoport); speaker fees (Bayer HealthCare, Biogen Idec, Merck, Novartis, Sanofi, and Teva); and support for educational activities (Bayer HealthCare, Biogen, CSL Behring, 43)